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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,143	09/30/2003	Young-Woo Lee	1293.1829	3823

21171 7590 06/16/2008

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EXAMINER	
PSITOS, ARISTOTELIS M	
ART UNIT	PAPER NUMBER
2627	
MAIL DATE	DELIVERY MODE
06/16/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/673,143	LEE ET AL.	
	Examiner	Art Unit	
	Aristotelis M. Psitos	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-44* is/are pending in the application.

4a) Of the above claim(s) *9-14,22-26 and 34-37* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,15-21,27-33,38-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Applicants' response of 3/28/08 has been considered with the following results.

In response to applicants' arguments the FINALITY of the previous OA is hereby withdrawn, the amendment of 3/28/08 has been entered and the following action is taken.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1-5, 15, 16,18,27,28, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Ogihara (either US 6868501 or EP 1191529) either further considered with EP 1041553.

The following analysis is made.

Claim 1	Ogihara
A recording medium type discriminating apparatus, comprising:	abstract/title
a radio frequency (RF) amplifier to output a signal based on light reflected from a recording medium;	see figs. 1 & 2, & element 9
a wobble amplitude detector to detect an amplitude of a wobble formed on the recording medium based on an output signal of the RF amplifier; and	above figs. & element 118
a system controller to discriminate a recording medium type of the recording medium by comparing the wobble amplitude with a pre-set wobble amplitude reference value.	Controller 15/see secondary reference

As analyzed above the above system discriminates medium type by having the appropriate RF output signal detected, a wobble signal detector ability and appropriate comparison.

As further disclosed, the comparison of the reference values are made with respect to each other and appropriate determination made in response thereto.

In the prior art of EP 1041553 (see the US equivalent patent 6816443) operates by appropriately detecting the rf signal, and amplitude thereof. Furthermore, the output signals are processed and

compared to various pre-stored levels - see the discussion wrt figures 3A-C in either the Ep or US document.

It would have been obvious to modify the base system of Ogihara with the teaching from the secondary reference (Hwang) motivation is to properly obtain a disc discrimination predicated upon alternate equivalent signal processing methods using comparison of selected signals with pre-stored values. The examiner concludes that whether one compares the signal of interest with each other to make a determination, or alternatively to compare with pre-stored values indicative of the set of media is merely an obvious selection between alternatives with no unexpected results occurring.

The method limitations of claim 15 are met when the above system operates.

With respect to claim 34, the record medium provided is interpreted to have computer readable code thereon.

With respect to claim 2, as disclosed such is present, push-pull wobble detector.

With respect to claims 3,4,5,16,18,28 and 30, such are inherently resent, i.e., see the discussion starting at col. 3 line 13 as well as the description of figure 3 in the base reference.

Response to Arguments

Applicant's arguments filed 3/28/08 have been fully considered but they are not persuasive. Applicants' attention is again drawn to the base system of Ogihara starting at col. 4 line 32 and continuing to col 5, line 34 as well as the description of figure 3 (element 118).

As noted therein, the detected amplitude values are compared to one another to see what their relationship is, i.e., which one is greater than the other. Upon such a comparison, the system then known what type of disc the system presently has - i.e., if LV1, then it is a DVD-RW and if LV2 is higher than it is a DVD+RW. The examiner interprets such as an indirect comparison with respect to reference values.

The secondary reference to Hwang compares the amplitude value/level of the detected rf envelope signals to pre-stored reference values – see the discussion starting in col. 4 lines 40+.

The examiner then concludes that one of ordinary skill in the art, with these two systems known to him, would consider it an obvious modification to compare the appropriate wobble signal (from

Ogihara) not against each other and then yielding a disc determination, but rather a comparison to pre-stored reference values (from Hwang). Such exchange of comparison protocols (indirect to a reference, vs. a direct comparison to reference) is merely a selection of equivalent capabilities - amplitude comparisons.

The examiner concludes that it would be reasonable for one of ordinary skill to expect such exchange of system protocols (comparison capabilities) to yield the same result – an indication of what type of disc is present.

Under 103 requirements, it is not physically insertions of one reference into one another. Rather if the combined teachings from the references can be reasonable combined in order to meet the claimed limitations. The examiner concludes that such is proper and would render the claimed invention obvious.

2. Claims 6-8,17,19-21,29,31-33,39-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims as stated in paragraph 1 above, and further in view of Morita.

With respect to the amplitude value regarding dvd-rw, such is further disclosed in Morita - see for instance col. 14, lines 34 plus.

With respect to dvd+rw, such is of course an agreed upon range (once noting the amplitude range for the dvd-rw discussed in Morita.

Since the claims (as grouped above in the Errata section of the previous OA), refer to various nm values, such values are within the range stated in the Morita reference - again note col. co. 14, lines 34 plus. Selection of any specific value within this range is considered merely an optimization of system parameters and obvious to one of ordinary skill in the art.

It would have been obvious to modify the base system of Ogihara with the above teaching from Morita in order to set an appropriate threshold value, or range of values that are indicative of the breaking point between the dvd-rw and dvd+rw amplitude. Selection of such is an optimization of the system and obvious predicated upon the well-known dvd-rw amplitude range.

Response to Arguments

Applicant's arguments filed 3/28/08 have been fully considered but they are not persuasive. The examiner maintains the rejection. The particular values defined in the above claims are considered within the scope of the disclosed reference to Morita, i.e., known to those of ordinary skill in the art, and hence

selection of particular values definitive of various different types of discs would be obvious to those of ordinary skill in the art to make an appropriate determination valid.

3. Claims 1,2,15 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe further considered with JP 2000-285582.

The examiner is not providing a copy of the above noted JP document, since the US equivalent to such- Hwang - US 6816443 has been previously provided.

Watanabe describes an amplitude detection capability for the wobble signal - see for instance, the disclosure starting at col. 23 line 47, wherein such detection can distinguish between various DVD discs. There is no clear depiction of what the ref. value can be.

As noted in the above secondary reference, comparisons with pre-stored RF signals (since they are different for various types of discs) are known.

It would have been obvious to modify the base system of Watanabe with the above additional teachings from JP 2000-285582, since the use of alternative equivalent comparison protocols is considered an obvious choice to one of ordinary skill in the arts.

Method claim 15 is met when the above combined systems operate, and the product is considered met, i.e., there is a record medium in the above combined systems which the examiner interprets as meeting the storage medium limitation of claim 27.

Response to Arguments

Applicant's arguments filed 3/28/08 have been fully considered but they are not persuasive. While the base reference to Watanabe yields a determination between rom and ram discs, and the additional teaching from the JP reference provides for further identification wrt additional types of rom/ram discs, the examiner concludes that one of ordinary skill in the art would be motivated to combine the additional teachings from the JP system in order to increase the types of rom/ram discs identifiable and hence increase the overall flexibility of the base system. As is known in this environment, dvd rom/rams track structure does follow a wobble pattern, and hence the output of the optical detection elements when led

to appropriate signal processing circuitry (filters) generate an envelope of the detected signal. Hence detection of the envelope yields a detection of the wobble.

As noted the JP system predicates his disc protocols upon the detection/determination of the envelope from the output of the RF amplifier (see the corresponding disclosure in the US pat. Equivalent starting at col. 2 line 1 and continuing till col. 3 line 21.

4. Claims 5,16 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1,2,15 and 27 as stated in paragraph 3 above, and further in view of Ogihara.

With respect to the ability of detecting differences between dvd (+), or (-) types of discs, Ogihara further teaches in this environment the ability of detecting appropriate wobble signal values for both types of discs, -see for instance the disclosure starting at col. 3 line 36 and continuing till col. 5 line 65.

It would have been obvious to modify the base system as stated above in paragraph 3 and further modify such with the additional teaching from Ogihara; motivation is to expand the signal recognition capability of the base-references.

Response to Arguments

Applicant's arguments filed 3/28/08 have been fully considered but they are not persuasive. These claims fall with their respective parent claims with the additional reliance upon the above noted Ogihara disclosure.

5. Claims 3,4,17,18,29,30-33,38-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1,2,15 and 27 as stated in paragraph 3 above further in view of Ohta.

With respect to claims 3, 4,17,18,29 and 30 all drawn to a peak-to-peak value of the wobble signal amplitude, Ohta teaches in this environment the ability of detecting the amplitude of the push-pull signal - see the disclosure with respect to figure 4, and with respect dependent claims 31-44, applicants'

attention is drawn to col. to the disclosure starting at col. 4 line 35 plus.

It would have been obvious to modify the base systems as relied upon above in paragraph 3 with the above additional teachings from Ohta, wherein the examiner interprets the push-pull signal value as described with respect to figure 4 as meeting the claimed peak-to-peak amplitude. Furthermore, the selection of the particular claimed values is considered merely an optimization of signal parameters and obvious to those of ordinary skill in the art.

Response to Arguments

Applicant's arguments filed 3/28/08 have been fully considered but they are not persuasive. Again, the examiner is not relying upon a piecemeal reconstruction of the systems, but rather relying upon the teachings from the above system(s) in order to meet the claimed limitations.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-Thr: 6:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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